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HOUSEKEEPERS' CHAT

Thursday, August 9, 1934.

(FOR BROADCAST USE ONLY)

Subject: "Tick Troubles." Information from the Bureau of Entomology, U.S.D.A.

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More news today about biting bugs -- insects, I should say, that are causing us human beings a good deal of distress these days by their bites. I'm going to tell you about some of the bad actors you may meet when you go off to the woods camping or fishing or picnicking -- and how to avoid trouble from them.

Let's take a glimpse into the private life of the dog tick, one common variety of tick that has Dillinger's record for crime against humanity beaten by a long way. Dr. F. C. Bishopp has many drawers of tick records in the rogues gallery of the Bureau of Entomology. And Dr. Bishopp says that this common tick not only bites and leaves an itching swollen sore that may last for weeks, sometimes months, but his bite can bring you one of several serious diseases. As a matter of fact, ticks are among the most important insect disease carriers in the world. They not only carry dangerous germs to man, but certain varieties also convey diseases to cattle, sheep and dogs, to say nothing of the wild animals. A young tick begins his career of crime by attacking a little woods animal, maybe a ground squirrel that happens to be suffering from a contagious fever. Well, the tick fills up on this sick animal's blood and, of course, picks up germs from him. Later on, that same tick may use your person as a feeding ground and transfer these germs to you. This is the way ticks have sometimes carried rabbit fever from rabbits to people. This is the way a kind of tick that is found chiefly in caves and burrows of animals in the Southwest and West brings relapsing fever with its bite. And this is the way that ticks carry that deadly disease -- Rocky Mountain spotted fever, which we've been hearing about so much these days because it seems to be spreading. The only way you can take this disease is through the bite of a tick or by contaminating your finger when picking ticks off animals. Fortunately, so far comparatively few ticks are infected with the fever germ. And fortunately, the tick doesn't transfer the germ to your blood stream until it has been attached for some hours. For many years the fever was carried only by the kind of tick that lives in the Rocky Mountain country, but recently the common dog tick has been found to transmit the malady and cases have been appearing in many different parts of the country. The fever is still most frequent in the western mountainous states, so if you live in this locality, you should take the strictest precautions against tick bites.

Well, to get back to the life history of the dog tick. It comes onto this planet as a tiny, innocent-looking egg laid on the ground in a protected place in the woods with a mass of about 4000 others. And in about a month, it hatches, along with its multitude of brothers and sisters, into its first stage -- a tiny, round, dark, flat, six-legged seed-tick or larva. These hungry little seed ticks sit around watchfully waiting for their first meal to come along in the form of some small wild animal. And how they can wait! In any of its forms, the tick can

live at least a year, sometimes more, without food or water. The scientists have tried keeping ticks shut up in a tight box for a year. They come out not only alive and kicking, but apparently as well and hearty as when they went in. But when a wood mouse or a ground squirrel or even a bird comes within reach, the tick takes a firm hold of its meal ticket and settles down to fill up on blood. When it has finished four to six days of heavy drinking, it drops to the ground, molts its skin, and then appears as an eight-legged, brownish, flat, nymph. Then it does some more watchful waiting. And presently along comes another unlucky little animal to which it attaches itself and crawls down under the fur flat against the skin for another full meal. Then it drops off again, again molts its skin, and this time changes into an adult male or female. Adult ticks pass the winter in protected places in the woods and emerge in the spring to attack you or your dog or any other large animal that comes their way. The females when engorged are nearly half an inch long and very much swollen. These engorged females drop off, seek protected places to lay their eggs and the story starts over again. All these changes take about a year.

Adult ticks are pretty "sly old bugs." Once they get their man, they proceed very cautiously until they find just the location where they want to take their meal. They often get on the feet and legs from low vegetation and then crawl up. A favorite place to settle is in the hair where they are somewhat protected. You don't feel them crawl or bite. Usually you don't even feel them when you pass your hand over them, because they fasten on so close to the skin and have smooth backs. Often, it's not until they begin bulging with blood, or until you find an itching swelling on your skin that you realize they are present. But, of course, if you look yourself over carefully, you can see them. The swelling left by a tick bite is caused by a fluid which the tick injects to make the blood run more freely -- more food for him with less effort, you see.

Sometimes ticks cause a paralysis. In some cases, a mother has called the doctor to treat her child for paralysis, and the doctor has found a tick in the child's scalp that she hasn't even noticed.

Well, now about controlling these pests. Since ticks and the small animals on which they feed like the protection of undergrowth and brush and like especially a cool damp place, better clear away undergrowth from houses and camps and also from any paths that you use frequently. If ticks are thick near a permanent camp, you can spray around the camp and the trails with creosote oil. This kills the vegetation, of course, but it is a great help against these insects. All wild mice should be destroyed since they provide food for the young ticks. Then, since the adult ticks are so common on dogs and horses, be sure to examine these animals at least every six days. Use tweezers or forceps in removing ticks from dogs. Never handle ticks for fear of getting the fever germs on your fingers.

The right kind of outing clothes is another way of protecting yourself from ticks. Close-fitting trousers and high laced boots over them ward off those that are inclined to crawl up the legs. Then, kerosene oil painted around the tops of boots will be a further discouragement. Or you can use a strip of cloth lightly treated with creosote oil and tied around the tops of boots.

In spite of such precautions, ticks may find their way to your body, so, after a trip to the woods, examine yourself carefully. You don't need to worry about catching Rocky Mountain spotted fever if you make careful examinations not more than eight hours apart, and if you take precautions against allowing ticks to come into the house on your clothes or on your dog. You can remove your clothes immediately, when you return from a woods trip, and put them into a tight can with a dish of carbon tetrachloride on top. This liquid soon becomes a heavy gas that fumigates your clothes. Use about a tablespoon of carbon tetrachloride for each cubic foot of space in the can.

Of course, clipping your dog is one way to keep down ticks. Then, you can dust him lightly with derris powder. Derris powder won't hurt him but it will end the tick's career.

Well, fortunately, the tick season is at its height in early summer. About August first they begin to disappear and you will find only occasional ticks during the late summer and fall.

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